Exam. Code : 115305 Subject Code : 4454

B.Com. (Financial Services) 5th Sem. (Batch 2020-23) OPERATIONS RESEARCH

Paper—II

Time Allowed—3 Hours] [Maximum Marks—50

Note:—Attempt FIVE questions in all, selecting at least
ONE question from each section. The fifth question
may be attempted from any section. All questions
carry equal marks.

SECTION-A

- 1. Define Operations Research. Account for the growing significance of Operations Research in today's business environment.
- 2. (a) Define Linear Programming. Discuss any five applications of Linear Programming.
 - (b) Solve graphically the following LPP:

Minimise
$$Z = 4x_1 + 3x_2$$

subject to $x_1 + 3x_2 \ge 9$
 $2x_1 + 3x_2 \ge 12$
 $x_1 + x_2 \ge 5$
 $x_1, x_2 \ge 0$

SECTION—B

- 3. (a) What do you understand by an Assignment Problem? Explain Hungarian Method of solving Assignment problem.
 - (b) Discuss the procedure for solving Travelling Salesman Problems.
- 4. Solve the following transportation problem:

| Source | | Supply | | | |
|--------|----|--------|----|----|-----|
| | 1 | 2 | 3 | 4 | |
| 1 | 15 | 18 | 22 | 16 | 30 |
| 2 | 15 | 19 | 20 | 14 | 40 |
| 3 | 13 | 16 | 23 | 17 | 30 |
| Demand | 20 | 20 | 25 | 35 | 100 |

SECTION—C

5. For the following 'two-person, zero-sum' game, find the optimal strategies for the two players and value of the game:

| | | Player B | | |
|----------|----------------|----------------|----------------|----------------|
| | | B ₁ | B ₂ | B ₃ |
| Player A | A ₁ | 5 | 9 | 3 |
| | A ₂ | 6 | -12 | -11 |
| | A_3 | 8 | 16 | 10 |

A dealer supplies you the following information pertaining 6. to an item of inventory:

Annual demand : 800 units

Buying cost : Rs. 150 per order

Inventory carrying cost: Rs. 3 per unit per year

Back-ordering cost : Rs. 20 per unit per year

- (i) What will be the optimal number of units of the inventory item he should buy in one lot?
- (ii) What quantity he should allow to be back-ordered?
- (iii) What will be the cost-savings, if any, resulting from back-ordering?
- (iv) What would be the maximum inventory of the item at any time of the year?
- (v) If the dealer wants that no more than 25% of the units can be back-ordered, should the policy of back-ordering be adopted?

SECTION-D

- (a) Differentiate between PERT and CPM. 7.
 - Customers for a local bakery arrive randomly (b) following a Poisson process. The single salesman can attend customers at an average rate of 12 customers per hour, the service time being distributed exponentially. The mean arrival rate of the customers is 20 per hour.

Determine the following:

- (i) The mean number of customers in the bakery.
- (ii) The mean time spent by a customer in the bakery.

- (iii) The expected number of customers waiting to be served.
- (iv) The mean waiting time of a typical customer in the queue.
- (v) The probability of no customer in the bakery.

8. A project has the following characteristics:

| Activity | Preceding | Expected Completion | | |
|----------|-----------|---------------------|--|--|
| | Activity | Time (in Weeks) | | |
| A | None | 5 | | |
| В | A | 2 | | |
| C | A | 6 | | |
| D | В | 12 | | |
| E | D | 10 | | |
| F | D | 9 | | |
| G | D | 5 | | |
| Н | В | 9 | | |
| I | C,E | 1 | | |
| J | G | 2 | | |
| K | F,I,J | 3 | | |
| L | K | 9 | | |
| M | H,G | 7 | | |
| N | M | 8 | | |

- (i) Draw a PERT network for this project.
- (ii) Find the critical path and the project completion time.
- (iii) Prepare an activity schedule showing the ES, EF, LS, LF and slack for each activity.

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B.Com. (Financial Services) 5th Semester (Batch 2020-23)

FINANCIAL MANAGEMENT

Paper-I

Time Allowed—3 Hours]

[Maximum Marks—50

Note:—Attempt FIVE questions in all, selecting at least ONE question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

- 1. Discuss various types of financial decisions. What is their inter-relationship?
- 2. (A) Explain the modern techniques of capital budgeting decisions.
 - (B) A project costs Rs. 25,000 and has a scrap value of Rs. 5,000 after 5 years. The net profits before depreciation and taxes for the 5 years period are expected to be Rs. 5,000, Rs. 6,000, Rs. 7,000, Rs. 8,000 and Rs. 9,000. Calculate Accounting rate of return assuming 50% rate of tax and depreciation on straight line method.

SECTION—B

- 3. What is leverage? Explain its types.
- 4. Write notes on :-
 - (a) Concept of point of indifference
 - (b) Financial break-even point.

SECTION—C

- 5. Define capitalization. Explain its types.
- 6. What is Weighted Average Cost of Capital? How is it calculated? How is different from marginal cost of capital?

SECTION-D

- 7. Briefly explain:
 - (a) Types of dividend
 - (b) Gordon's Model of dividend decisions.
- 8. Explain the concept of working capital. Discuss approaches to working capital financing.

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B.Com. (Financial Services) 5th Semester (Batch 2020-23)

FOREIGN TRADE

Paper-VI

Time Allowed—3 Hours]

[Maximum Marks—50

Note:—Attempt FIVE questions in all, selecting at least ONE question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION-A

- 1. What do you mean by foreign trade? What are the implications of foreign trade for developing countries?
- 2. What is the composition of India's foreign trade? Describe India's major exports and imports in recent years.

SECTION—B

- 3. 'Globalization is the development of an increasingly integrated global economy marked especially by free trade, free flow of capital, and the tapping of cheaper foreign labour markets'. Explain. What are the implications of globalization in growing world economy?
- 4. What do you understand by Special Economic Zones (SEZs)? What are the reasons to set up SEZs? Describe any three SEZs in India.

SECTION—C

- 5. What is World Trade Organisation (WTO)? How does WTO encourage foreign trade among member countries?
- 6. What is International Monetary Fund (IMF)? Explain the role of IMF in facilitating International Trade.

SECTION—D

- 7. 'The Government in an under developed nation should protect domestic industries against foreign competition by means of tariffs, subsidies, import quotas, or other restrictions'. Do you agree with the statement? Give reasons to support your answer.
- 8. What do you understand by rate of exchange? How it is determined? Enumerate various factors influencing exchange rate in a country.

Exam. Code: 115305 Subject Code: 4457

B.Com. (Financial Services) 5th Sem. (Batch 2020-23) MARKETING OF FINANCIAL SERVICES Paper—V

Time Allowed—3 Hours] [Maximum Marks—50

Note: — Attempt FIVE questions in all, selecting at least
ONE question from each section. The fifth question
may be attempted from any section. All questions
carry equal marks.

SECTION-A

- 1. Explain in detail the changing environment of financial services.
- 2. What is product life cycle? Discuss with the help of suitable examples.

SECTION-B

- 3. Explain the various methods of pricing financial products and services.
- 4. Discuss the factors influencing pricing decisions of financial services.

SECTION—C

- 5. What is meant by a distribution channel? Describe the functions of distribution channels.
- 6. Explain the promotional mix used in marketing of financial services.

SECTION-D

- 7. Discuss how mobile phone banking is an important Marketing Information System.
- 8. How are mutual funds marketed? Explain.